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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,035	08/21/2003	Michael E. Ring	CRD 01482	7356

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JAMES RAY & ASSOCIATES  
2640 Pitcairn Road  
Monroeville, PA 15146

EXAMINER
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BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/645,035

Applicant(s)

RING ET AL.

Examiner

Melody M. Burch

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13, 16-18 and 20-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13, 16-18 and 20-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 21 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 2, 3, and 7 are objected to because of the following informalities:

- In claims 2 and 3 “detrimental extraneous foreign material” should be changed to –said detrimental extraneous foreign material—since Applicant admits that the foreign material in claims 2 and 3 is intended to be the same as that in claim 1;
- In claim 7 a correlation between the pair of guide means of claim 7 and the guide means of claim 6 should be established since Applicant admits that one of the pair of guide means of claim 7 includes element 84 and guide means of claim 6 includes element 84;
- In line 2 of paragraph (b) of claim 20 the phrase “a a” should be changed to –a--. Appropriate correction is required.

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Claim number 19 has been skipped. Claims 20-22 should be renumbered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 20. The phrase "at least one inflatable air bag spring" in the first line of paragraph (c) is indefinite in light of the earlier recitation of "an air spring actuator" in line 14. The claim reads as if the air spring actuator and air bag spring or completely separate elements, however, from the drawings it appears that the air spring actuator includes the air bag spring. Also with regards to claim 20 Applicant should clearly point out which element represents the claimed first and second force transmitting members and the control linkages. Examiner notes that the arrangement of the claimed elements is unclear since only one force-transmitting member 28 is clearly labeled. Clarification is required. The remaining claims are indefinite due to their dependency from claim 20.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6-13, 18, and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6116385 to Ring.

Re: claims 1 and 20. Ring shows in figures 1 and 3 an actuating member for a

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railway vehicle brake assembly, such railway vehicle brake assembly having an air bag actuator 58 incorporated therein, said actuating member comprising: a first substantially vertically disposed plate like member or right side of element 50, said first substantially vertically disposed plate like having a first substantially planer surface shown in the area of the lead line of number 51 engageable via intervening elements with a first surface shown in the area of the lead line of number 88 of a second substantially vertically disposed plate like member shown in the area of element number 83 attached to such air bag actuator, a substantially horizontally disposed plate like member shown in the area of the lead line of number 84 connected to the first substantially vertically disposed plate like member adjacent a bottom edge thereof and extending substantially perpendicular to the first planar surface of the first vertically disposed plate member for shielding at least a first portion of the air bag actuator from foreign material as shown, and a means shown at the left end of element 60 connected to a radially opposed second surface of the first vertically disposed plate like member via intervening elements for securing the actuating member to a control linkage (or element connected to the left end of element 60 shown in figure 1) of the assembly.

Re: claims 2 and 21. Ring shows in figure 3 the limitation wherein the actuating member further includes a first plate member 82 connected to an upper surface of the substantially horizontally disposed member and to the first planar surface of the first substantially vertically disposed plate like member adjacent a first side edge thereof and extending substantially perpendicular thereto for shielding at least a second portion of the air bag actuator from foreign material and for providing added strength.

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Re: claim 3. Ring shows in figure 3 the limitation wherein the actuating member further includes a second plate like member 31 connected to the upper surface of the substantially horizontally disposed member via intervening elements and to the first planar surface of the first substantially vertically disposed plate like member adjacent a second side edge thereof and extending substantially perpendicular thereto for shielding at least a third portion of the air bag actuator from foreign material and for providing added strength.

Re: claims 4 and 8. Ring shows in figure 3 the limitation wherein the first vertically disposed plate member includes at least one mounting aperture 64 formed therethrough. Or in an alternate interpretation the first vertically disposed member can be element 83 and the mounting aperture can be element 86.

Re: claims 6, 9, 10, and 22. Ring shows the invention as set forth in the rejection of claim 1 above and shows a guide means 72 connected to an disposed closely adjacent a first outer edge of (via intervening elements in the position shown in figure 3) and (portions of which being) substantially perpendicular to the planar surface portion of the first vertically disposed plate member for guiding and alignment and a securing means 31 connected to the first substantially vertically disposed plate member for enabling attachment to a rigid structure show attached to element 31 in figure 1.

Re: claim 7. Ring shows in figure 3 a pair of guide means 72,74, a second one of the pair of guide means 74 disposed closely adjacent a second outer edge of and substantially perpendicular to the planar surface portion of the first vertically disposed plate member.

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Re: claims 11, 12, and 18. Ring shows in figure 3 a means (or thin piece attached to the right of element 74) for limiting reciprocal motion of the air spring actuator.

Re: claim 13. Ring shows in figure 3 an air inlet 64 in communication with the at least one air bag spring 59.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ring in view of US Patent 6267043 to Plantan et al.

Re: claim 5. Ring shows in figure 3 the limitation wherein the means connected to the radially opposed second surface of the first vertically disposed plate member for securing the actuating member to the control linkage of the railway vehicle brake assembly includes at least one plate member or bottom plate of the leftmost side of element 60 having an aperture as shown formed therethrough.

Ring does not include the limitation of a pin member disposed in the aperture for securing the at least one plate member to such control linkage.

Plantan et al. teach in figures 2 and 4 the use of a brake actuator having a plate member 84 having an aperture 86 and a pin member 88 disposed in the aperture.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the aperture of the plate member of Ring to have included a pin member therethrough, as taught by Plantan et al., in order to provide a means of reciprocating element 60 within elements 83 and 84.

9. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ring in view of US Patent 4846785 to Cassou et al.

Ring describes the invention substantially as set forth above, but does not include the limitation of a visual travel indicator.

Cassou et al. teach in col. 4 lines 2-5 the limitation of an actuator including a visual travel indicator or markings 20.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the portion of element 60 extending outside element 83 to have included a visual travel indicator, as taught by Cassou et al., in order to provide a means of monitoring linear travel of element 60 to monitor the amount of brake actuation for brake control purposes.

### ***Response to Arguments***

10. Applicant's arguments filed 2/28/05 have been fully considered but they are not persuasive. With regards to claim 1, Applicant argues that the casing 50 having an inner surface 76 is not taught by first substantially vertically disposed plate like member 60 of the present invention. Examiner notes that the substantially vertically disposed plate like member or cross-sectional surface shown in the area of the lead lines of numbers 51 and 81 of the casing 50 is clearly taught by Ring in figure 3.

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With regards to claim 6, Applicant argues that end 83 is attached or connected to the casing 50 but does not directly engage the air bag 58. Examiner notes that the argument is more specific than the claim language and that the elements are connected as claimed via intervening elements. The claim language does not preclude connection by way of intervening elements.

With regards to claim 9, Applicant argues that the present invention does not employ a "hollow piston assembly mounted for reciprocal movement within the cylindrical casing" as claimed in the claims of Ring. Examiner notes that the claims of the instant invention (not the claims of the prior art) are under examination. It is not necessary that the disclosure of the instant application read on the claims of the prior art reference. Accordingly, the argument is irrelevant.

With regards to claim 5, please see the response to the arguments regarding claim 1.

Finally, with regards to claims 14, 15, and 16, Examiner notes that claims 14 and 15 have been cancelled and that claim 16 will remain rejected for the following reason.

In response to applicant's argument that the Cassou et al. reference is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the Cassou et al. reference is reasonably pertinent to the particular problem with which the applicant was concerned. Similar to Applicant,

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Cassou et al. sought to provide a means of monitoring linear travel. Cassou et al. employed the use of visual markers to achieve the goal. Cassou et al. show that the prior art teaches that it is old and well known to provide visual markers on a moving object to provide a means of monitoring the linear travel of the moving object.

For the above reasons, the rejections have been maintained.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 703-308-0830. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*mmb 3/29/05*  
mmb  
March 29, 2005

*M.C.G. 3/31/2005*  
**MATTHEW C. GRAHAM**  
**PRIMARY EXAMINER**  
**GROUP 310**